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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/597,705	06/16/2000	Jeffrey J. Gold	PD-990259	3463

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THE DIRECTV GROUP, INC.  
PATENT DOCKET ADMINISTRATION  
CA / LA1 / A109  
2230 E. IMPERIAL HIGHWAY  
EL SEGUNDO, CA 90245

EXAMINER
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STEVENS, THOMAS H

ART UNIT	PAPER NUMBER
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2121

MAIL DATE	DELIVERY MODE
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01/06/2012

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/597,705	<b>Applicant(s)</b> GOLD ET AL.	
	<b>Examiner</b> THOMAS STEVENS	<b>Art Unit</b> 2121	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/14/2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 1-21 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-8, 11 and 12 is/are rejected.
- 8) ☒ Claim(s) 9, 10, 13-21 is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/16/00</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

### **DETAILED ACTION**

1. Claims 1-21 were examined.

#### ***Section I: Petition to Revive***

2. The petition to revive 9/9/11 was reviewed and accepted.

#### ***Section II: Response to Arguments***

##### ***Drawings***

3. The drawing objection was addressed, explained and corrected.

##### ***112 1<sup>st</sup> Paragraph***

4. Applicants have amended claims 15 and 20 to clearly disclose the invention. The rejection is withdrawn.

##### ***102(b) Zmit***

5. Applicants' arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Section III: Non Final Rejection***

##### ***Claim Objections***

6. The examiner has provided a number of claim deficiency examples; however, the list of deficiencies may not be inclusive. Applicant should refer to these as examples of deficiencies and should make all necessary corrections to eliminate the claim objections.

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- Claim 1, line 10, "the simulated system dynamics" to "a simulated system dynamics"
- Claim 2, line 2, "the command data" to "a command data"
- Claim 2, line 2, "the telemetry data" to "telemetry data"
- Claim 4, line 2, "the command data" to "a command data"
- Claim 4, line 2, "the telemetry data" to "telemetry data"
- Claim 8, line 10, "the simulated system dynamic" to "a simulated system dynamic"
- Claim 13, line 1, "the power" to "power"
- Claim 16, line 1, "the simulated spacecraft control processor" to "a simulated spacecraft control processor"
- Claim 17, line 1, "the simulated spacecraft control processor" to "a simulated spacecraft control processor"
- Claim 18, line 2, "the counter count" to "the master time counter"
- Claim 21, line 2, "the simulation engine" to "a simulation engine"
- Claim 21, line 2, "the central time" to "the central time source"

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 1-7, 8,11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 1 recites the limitation "the spacecraft" in line 8. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 6 recites the limitation "the spacecraft" in line 3. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 11 recites the limitation "the spacecraft" in line 3. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 12 recites the limitation "the spacecraft " in line 4. There is insufficient antecedent basis for this limitation in the claim.

### ***Reasons for Allowance***

13. The following is an examiner's statement of reasons for allowance are considered allowable since when reading the claims in light of the specification, as per MPEP § 2111.01, In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385 (Fed. Cir. 1983). The prior art of record by Zamit discloses a spacecraft emulation system (pg. 447, "GSMST simulation Models" section ) comprising: an embedded processor (e.g., spacecraft control processor, pg. 442, Nomenclature section) that the simulated spacecraft data, ("spacecraft simulation communicates sensor input to the test interface modules, pg. 447, "Sensor Models" section ) and processes attitude control system

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data(pg. 442, abstract lines 1-3, "complex attitude or payload control subsystem)[claims 1 and 8 and 15].

However, Zamit, fails to disclose a central time source generating a time reference; an emulated spacecraft control processor which contains; provides an emulated input/output interface to communicate simulated spacecraft data, wherein the embedded processor processes; contains a real time clock having a real-time clock period; a first simulation engine; the emulated spacecraft control processor to simulate an attitude control system of the spacecraft in real-time, the first simulation engine operative to produce sensor data for input to the emulated spacecraft control processor based on the simulated system dynamics and adjusts the real time clock period in response to the time reference[claims 1 and 8]; contains a master counter; a first simulation engine coupled to the time central time source and the emulated spacecraft control processor, the first simulation engine operative to produce data for input to the emulated spacecraft control processor based on the simulated system dynamic, and adjusts a time parameter of a real time clock in response to said master counter and said central time count[claim 8]; generating a master counter count in the emulated spacecraft control processor; generating a reference time from a central time source; receiving master counter count and the reference time in a compute engine; and, determining a short term bias and a long term drift in response to the reference[claim 15].

Furthermore, none of the references of record alone or in combination disclose or suggest the combination of limitations as claimed in the independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Note from the Examiner***

14. The Examiner communicated, via email to, Mr. Rafter (12/15/11) and Mr. Cousins (12/22/11) regarding a supplemental amendment in order to accelerate prosecution. Since this case has an internal deadline to meet and there hasn't been a supplemental amendment filed since 12/15/11, it was necessary for the Office to expedite this office action.

***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715.

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Albert Decady (571-272-3819). The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

/Thomas H. Stevens/

Examiner, Art Unit 2121

/Ramesh B. Patel/

Primary Examiner, Art Unit 2121